

The James Webb Space Telescope (JWST) will study the birth and evolution of galaxies, stars and planetary systems, from the beginning of time about 13.7 billion years ago, to the present. It will look back in time by observing objects as they were when they sent out their light. Using infrared sensors, JWST will have unprecedented ability to determine the chemical nature of dust clouds, and find evidence of planets orbiting within them. It will have a deployable telescope with a 6.5 m (21 foot) diameter segmented adjustable primary mirror, operating at an extremely low temperature, with instruments for imaging and spectroscopy. Launched by a rocket in 2011, it will be placed in orbit around the second Sun-Earth Lagrange point (L2), 1.5 million kilometers, or 940,000 miles from the Earth. NASA's Goddard Space Flight Center in Greenbelt, Maryland is the mission lead for an international collaboration with the European and Canadian Space Agencies. The prime contractor is Northrop Grumman Space Technology. JWST is a five-year science mission (with a 10 year operations goal). The Space Telescope Science Institute (STScI) will operate the telescope and perform data acquisition and processing. Astronomers around the world will compete for observing time.

www.jwst.nasa.gov